# M&O South District Storm Response

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#### **Topics**

- Major named Storms in Delaware
- Routine Storms in Delaware
- Hurricane Irma Assistance
- Future Plans



# Primehook - Sandy





### Route 1 - Sandy





#### Route 1 - Sandy





## Route 1 - Sandy





#### **Lessons Learned – Major Storms**

- Public awareness/understanding
- Infrastructure can be hardened
- Hardening exposes additional weak points
- Dramatic localized economic impacts
- Detour routes can be compromised
- Huge impact on operations
- Infrastructure sustains damage
- Pre-planning doesn't significantly mitigate damage
- Permitting issues are resolved within days



## Route 1 Flooding (Nor Easter)





# Route 1 Flooding (Nor Easter)





#### **Lessons Learned – Routine Storms**

- Institutional Complacency
- Public is not as understanding
- Initiated effort to raise pavement on Route 1
- Localized problems can be fully resolved
- Minimal disturbance to operations
- Infrastructure remains intact
- Pre-planning can mitigate damage
- Permits can be problematic



#### Miami









# Florida Keys





#### Lessons Learned -Florida Keys

- Damage was very localized
- Building code effects were clear
- Homes in Keys in some areas were very resilient
- No power, water, ice, fuel, credit (cash only) for a large area
- Urban Miami no power for at least 6 days
- Infrastructure was completely overcome
- Bare shelves at stores
- Cell coverage was excellent
- Huge number of first responders taxed system



#### **Future Plans**

- Continue tabletop exercises with outside agencies
- Continue making local improvements to road network
- Enhance survivability of facilities
- Protect drainage structures before storms
- Use GIS information to rapidly locate buried facilities
- Implement lessons learned from Florida response to aid others when assisting Delaware

